

**Notice of Allowability**

Application No.

10/086,177

Examiner

Bridget E. Bunner

Applicant(s)

TUDAN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment of 11 April 2007.
2. ☒ The allowed claim(s) is/are 33-38 (renumbered as claims 1, 2, 5, 3, 4, and 6, respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 4/12/07
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian Boyer on 08 June 2007:

In claim 33, line 5 : After the phrase "1-14" insert therefore --of SEQ ID NO: 208--

In claim 33, line 8: Delete "comprises 4 natural amino acids" and insert therefore --consists of 4 glycines --

In claim 35, line 1: Delete "A composition of" and insert therefore --A composition comprising a CXC chemokine receptor 4 (CXCR4) agonist wherein the agonist comprises--

Claim 36. ~~An amino acid sequence having at least 95% homology to the agonist of claim 33 and having the function of binding to a CXCR4 receptor.~~ A variant of the CXCR4 agonist of claim 33, wherein said variant differs from said agonist by the following:

a) the variant has an N-terminal 14 amino acids that is at least 95% identical to amino acids 1-14 of SEQ ID NO: 208; or

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b) the variant has a C-terminal 13 amino acids that is at least 95% identical to amino acids 19-31 of SEQ ID NO: 208.

In claim 37, line 1: Delete “amino acid sequence” and insert therefore --CXCR4 agonist variant--

38. ~~An amino acid sequence having at least 95% homology to the composition of claim 35 and having the function of binding to a CXCR4 receptor.~~ A variant of the CXCR4 agonist of claim 35, wherein said variant differs from said agonist by the following:

a) the variant has an N-terminal 14 amino acids that is at least 95% identical to amino acids 1-14 of SEQ ID NO: 208; or

b) the variant has a C-terminal 13 amino acids that is at least 95% identical to amino acids 19-31 of SEQ ID NO: 208.

#### EXAMINER'S COMMENT

It is noted that support for the new claim language recited claims 36 and 38 flows from the specification at page 17, lines 7-20. Additionally, amino acids 1-14 of SEQ ID NO: 208 correspond to amino acids 1-14 of human stromal cell derived factor-1 (SDF-1) (see specification at page 44, lines 1-9; page 47, lines 19-23). Amino acids 19-31 of SEQ ID NO: 208 correspond to amino acids 55-67 of SDF-1 (see page 47, lines 19-23).

***Information Disclosure Statement***

The information disclosure statement filed 12 April 2007 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Although Applicant indicates that copies of many of the references were filed in the parent application 09/835,107, the Examiner has been unable to locate these references or an information disclosure statement listing such references in the parent case. Thus, the references have not been considered and have been crossed off of the IDS submitted 12 April 2007. Additionally, McLaughlin 1988 and Moss 1995 were previously considered by the Examiner on the IDS of 12 November 2002 and thus, have been crossed off the IDS of 12 April 2007.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bridget E. Bunner whose telephone number is (571) 272-0881. The examiner can normally be reached on 8:30-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol can be reached on (571) 272-0835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BEB  
Art Unit 1647  
13 June 2007

*Bridget E. Bunner*

**BRIDGET BUNNER  
PATENT EXAMINER**